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PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Attorney Docket No.	18-150
First Inventor or Application Identifier	SORENSEN, Jens Ole
Title	"Selection of Test Species..."
Express Mail Label No.	EE253477985US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

1. ☒ * Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)
2. ☒ Specification [Total Pages 19]
(preferred arrangement set forth below)
- Descriptive title of the Invention
 - Cross References to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to Microfiche Appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings (if filed)
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
3. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 3]
4. Oath or Declaration [Total Pages 1]
- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 C.F.R. § 1.63(d))
(for continuation/divisional with Box 16 completed)
- i. ☐ **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

5. ☐ Microfiche Computer Program (Appendix)
6. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☐ Computer Readable Copy
- b. ☐ Paper Copy (identical to computer copy)
- c. ☐ Statement verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

7. ☒ Assignment Papers (cover sheet & document(s))
8. ☐ 37 C.F.R. § 3.73(b) Statement of Power of Attorney (when there is an assignee)
9. ☐ English Translation Document (if applicable)
10. ☐ Information Disclosure Statement (IDS)/PTO-1449 [Copies of IDS Citations]
11. ☐ Preliminary Amendment
12. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
13. ☒ * Small Entity Statement filed in prior application, Status still proper and desired (PTO/SB/09-12)
14. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
15. ☐ Other: _____

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Prior application information: Examiner _____ Group / Art Unit: _____

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.**17. CORRESPONDENCE ADDRESS**☐ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) or ☐ Correspondence address below

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**VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) & 1.27(c))--SMALL BUSINESS CONCERN**

Docket No.: 18-151Applicant or Patentee: JENS OLE SORENSEN

Serial or Patent No.:

Filed or Issued: HEREWITHTitle: Selection of Test Species For Testing To Identify Components Thereof That Deleteriously Affect A Target Species Member

I hereby declare that I am

- ☐ the owner of the small business concern identified below;
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Universal VenturesADDRESS OF SMALL BUSINESS CONCERN P.O. Box 822 GT, Cayman Islands, B. W. I.

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☒ the specification filed herewith with title as listed above.
☐ the application identified above.
☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention must file separate verified statements averring to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization having any rights in the invention is listed below:

- ☒ No such person, concern, or organization exists.
☐ Each such person, concern or organization is listed below

Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING: Jens Ole SorensenTITLE OF PERSON IF OTHER THAN OWNER: Vice PresidentADDRESS OF PERSON SIGNING: P. O. Box 221, North Side, Grand Cayman, Cayman Islands, B. W. I.

Jens Ole Sorensen
 SIGNATURE

March 5 - 1999
 DATE

SELECTION OF TEST SPECIES FOR TESTING TO IDENTIFY COMPONENTS THEREOF THAT DELETERIOUSLY AFFECT A TARGET SPECIES MEMBER

BACKGROUND OF THE INVENTION

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The present invention generally pertains to materials that deleteriously affect members of a target species and is particularly directed to selection of test species as well as to identifying, manufacturing, testing and using such materials.

10 It has been known to identify components of members of test species that deleteriously affect members of a target species by a method including the steps of:

(a) separating at least one member of each of a plurality of test species into a plurality of components;

15 (b) exposing at least some of said separated components of said member(s) of the test species separately to members of the target species; and

(c) examining said exposures to determine for said identification whether members of the target species have been deleteriously affected by said exposures.

20 This method has been conducted to identify materials that are deleterious to a target species that is a symbiont of an adjainer species, such as a parasite of the adjainer species. Although such identification method has been practiced with test species that are symbionts or traditional food sources of the adjainer species, it is believed that such symbiotic relationship and such food-source relationship between the test species and the adjainer species have been merely incidental to broad screenings of a plurality of

different test species based upon their chemical compositions rather than an intentional aspect of the method. A food source includes plants and animals and secretions and waste products therefrom, such as honey, pollen, sap, milk, feces and urine.

5 Symbiotic relationships between different species include (a) a parasitic relationship, wherein one species benefits from the relationship and the other species is harmed by the relationship; (b) mutualism, wherein both species benefit from the relationship; (c) commensalism, wherein one species benefits from the relationship and the other species is unaffected by the relationship; and (d) amensalism, wherein one
10 species is harmed by the relationship and the other species is unaffected by the relationship.

SUMMARY OF THE INVENTION

15 The present invention provides a method of identifying components of members of test species that deleteriously affect members of a target species, comprising the steps of:

(a) separating at least one member of a test species into a plurality of components;

(b) exposing at least some of said separated components of said member(s) of the

20 test species separately to members of the target species, wherein the target species is a symbiont of an adjoiner species;

(c) examining said exposures to determine for said identification whether members of the target species have been deleteriously affected by said exposures; and

(d) selecting the test species from among test species that are attached or internal to a member of the adjoiner species whom has not reacted to the target species as adversely as other members of the adjoiner species.

5 The present invention provides each separated component of a member of a test species identified by any of the above-described identification methods as deleteriously affecting members of a target species or an equivalent of said identified component.

10 The present invention further provides methods of manufacturing products including a test-species component identified by any of the foregoing methods as deleteriously affecting members of a target species and/or an equivalent of said identified component, as described below in the detailed description of the preferred embodiments.

15 The present invention also provides products manufactured according to such methods of manufacture

20 The present invention additionally provides methods of using and testing products manufactured according to such methods of manufacture, as described below in the detailed description of the preferred embodiments.

 Additional features of the present invention are described with reference to the detailed description of the preferred embodiments.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a block diagram of one preferred embodiment of the identification method of the present invention.

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FIG. 2 is a block diagram of another preferred embodiment of the identification method of the present invention.

FIG. 3 is a block diagram of a further preferred embodiment of the identification method of the present invention.

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FIG. 4 is a block diagram showing preferred embodiments of product manufacturing methods according to the present invention

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FIG. 5 is a block diagram of one preferred embodiment of a product testing method according to the present invention

FIG. 6 is a block diagram of another preferred embodiment of a product testing method according to the present invention.

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DETAILED DESCRIPTION

In the various embodiments of the present invention described herein, the adjainer species include but are not limited to the human species, a species having a near-human-species genetic composition, such as chimpanzees and pigs, and other species afflicted with parasitic diseases; the target species include but are not limited to HIV (the AIDS-causing virus), cancer causing viruses, E.coli bacteria, histoplasma capsulatum (which causes histoplasmosis), borrelia burgdoferi (which causes Lyme's disease), the typhoid fever causing virus, the Norwalk virus and the rotavirus; and the test species include but are not limited to plasmodium falciparum, plasmodium ovale, plasmodium vivax, and plasmodium malariae (all four of which are species of malaria), treponema pallidum (syphilis), the smallpox virus, mycobacterium tuberculosis, ascaris lumbricoides (tapeworm), deratophyte (athlete's foot), helicobacter pylori (ulcer-causing bacteria) and traditional food sources of the adjainer species, including co-evolutionary food sources of the adjainer species that previously had not been known to be food sources of the adjainer species.

Referring to FIG. 1, one preferred embodiment of the method of the present invention of identifying components of members of test species that deleteriously affect members of a target species that is a symbiont of a given adjainer species includes a step 10 of selecting a test species from among species that are attached to an adjainer species member whom was exposed to the target species but did not react adversely thereto as did other exposed members of the adjainer species; a step 12 of separating at least one

member of the selected test species into a plurality of components; a step 14 of exposing at least some of the separated components of the member(s) of the test species separately to members of the target species; and a step 16 of examining such exposures to determine for such identification whether members of the target species have been deleteriously affected by such exposures.

Referring to FIG. 2, another preferred embodiment of the method of the present invention of identifying components of members of test species that deleteriously affect members of a target species that is a symbiont of a given adjoiner species includes a step 20 of selecting a test species from among species that are attached to an adjoiner species member whom was exposed to the target species and reacted adversely thereto but not as adversely as did other exposed members of the adjoiner species; a step 22 of separating at least one member of the selected test species into a plurality of components; a step 24 of exposing at least some of the separated components of the member(s) of the test species separately to members of the target species; and a step 26 of examining such exposures to determine for such identification whether members of the target species have been deleteriously affected by such exposures.

Referring to FIG. 3, a further preferred embodiment of the method of the present invention of identifying components of members of test species that deleteriously affect members of a target species that is a symbiont of a given adjoiner species includes a step 30 of selecting a test species from among species that are attached to an adjoiner species member; a step 32 of separating at least one member of the selected test species into a

plurality of components; a step 34 of exposing at least some of the separated components of the member(s) of the test species separately to members of the target species; and a step 36 of examining such exposures to determine for such identification whether members of the target species have been deleteriously affected by such exposures.

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In some preferred embodiments, the test species are symbionts or traditional food sources of the adjainer species.

10 In some preferred embodiments, the separation step 12, 22, 32 the exposure step 14, 24, 34 and the examination step 16, 26, 36 are executed methodically and systematically with a large number of test species that are symbionts of the adjainer species.

15 In some preferred embodiments, the separation step 12, 22, 32 the exposure step 14, 24, 34 and the examination step 16, 26, 36 are executed methodically and systematically with a large number of test species that are traditional food sources of the adjainer species.

20 In some preferred embodiments, the separation step 12, 22, 32 is executed with such a large number of test species that are symbionts of the adjainer species that the ratio of execution of the separation step 12, 22, 32 when the test species are symbionts of the adjainer species relative to execution of the separation step 12, 22, 32 when the test species are not symbionts of the adjainer species is significantly higher than said ratio of

execution according to the prior art.

In some preferred embodiments, the separation step 12, 22, 32 is executed with such a large number of test species that are traditional food sources of the adjointer species that the ratio of execution of the separation step 12, 22, 32 when the test species are traditional food sources of the adjointer species relative to execution of the separation step 12, 22, 32 when the test species are not traditional food sources of the adjointer species is significantly higher than said ratio of execution according to the prior art.

In some preferred embodiments, the exposure step 14, 24, 34 and the examination step 16, 26, 36 are executed in such large numbers when the test species are symbionts of the adjointer species that the ratio of execution of the exposure step 14, 24, 34 and the examination step 16, 26, 36 when the test species are symbionts of the adjointer species relative to execution of the exposure step 14, 24, 34 and the examination step 16, 26, 36 when the test species are not symbionts of the adjointer species is significantly higher than said ratio of execution according to the prior art.

In some preferred embodiments, the exposure step 14, 24, 34 and the examination step 16, 26, 36 are executed in such large numbers when the test species are traditional food sources of the adjointer species that the ratio of execution of the exposure step 14, 24, 34 and the examination step 16, 26, 36 when the test species are traditional food sources of the adjointer species relative to execution of the exposure step 14, 24, 34 and the examination step 16, 26, 36 when the test species are not traditional food sources of

the adjoiner species is significantly higher than said ratio of execution according to the prior art.

In some preferred embodiments of the methods described above, prior to the separation step 12, 22, 32, the method includes a step (not shown) of exposing at least a component of the target species to at least one member of the selected test species for the purpose of establishing any immunity of such target-species component to the selected test species as may be established.

In some embodiments of the above-described methods, members of the test species at least in some aspect deleteriously affect members of the adjoiner species.

In some embodiments of the above-described methods, members of the target species at least in some aspect deleteriously affect members of the adjoiner species.

Preferred embodiments of methods according to the present invention of manufacturing a product including a test-species component identified by any of the above-described methods as deleteriously affecting members of a target species and/or an equivalent of said identified component are described with reference to FIG. 4. The product is manufactured either by a step 40 of separating the identified component in bulk quantities from said members of said test species or by a step 42 of synthesizing the identified component and/or an equivalent of the identified component in bulk quantities. The manufacturing method may further include a step 44 of modifying the product to

decrease any deleterious effect upon the adjoiner species caused by the identified component and/or the equivalent of the identified component; and/or a step 46 of modifying the product to increase the deleterious effect upon the target species caused by the identified component and/or the equivalent of the identified component. The deleterious effect can be modified by varying the quantity of the identified component and/or the equivalent of the identified component within the product.

Referring to FIG. 5, one preferred embodiment of a method according to the present invention of testing the above-described manufactured product, includes a step 50 of exposing the product to the adjoiner species or a member of a trial species; and a step 52 of examining such exposure to determine the extent of any deleterious effect upon the adjoiner species or the trial species respectively. Preferably, the trial species reacts to such exposure in a manner equivalent to such a reaction by the adjoiner species.

Referring to FIG. 6, another preferred embodiment of a method according to the present invention of testing the above-described manufactured product, includes a step 56 of exposing the product to the target species; and a step 58 of examining such exposure to determine the extent of the deleterious effect upon the target species.

A preferred embodiment (not shown) of a method according to the present invention of using a component of a member of a test species identified by any of the above-described methods and/or an equivalent of the identified component to treat an adjoiner species that is afflicted with a target species includes the step of exposing the

identified component and/or the equivalent of the identified component to members of the target species that are residing in or on a member of the adjoiner species. Preferably, such exposure is accomplished by using a product manufactured by one of the above-described manufacturing methods.

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In some, but not all, of the various embodiments of the deleterious-component identifying methods according to the present, it is preferred that during the step of exposing separated components of member(s) of the test species to members of the target species, the exposed members of the target species are isolated from the adjoiner species.

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The advantages specifically stated herein do not necessarily apply to every conceivable embodiment of the present invention. Further, such stated advantages of the present invention are only examples and should not be construed as the only advantages of the present invention.

15

While the above description contains many specificities, these should not be construed as limitations on the scope of the present invention, but rather as examples of the preferred embodiments described herein. Other variations are possible and the scope of the present invention should be determined not by the embodiments described herein but rather by the claims and their legal equivalents.

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I Claim:

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1. A method of identifying components of members of test species that deleteriously affect members of a target species, comprising the steps of:

(a) separating at least one member of a test species into a plurality of components;

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(b) exposing at least some of said separated components of said member(s) of the test species separately to members of the target species, wherein the target species is a symbiont of an adjainer species;

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(c) examining said exposures to determine for said identification whether members of the target species have been deleteriously affected by said exposures; and

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(d) selecting the test species from among test species that are attached or internal to a member of the adjainer species whom has not reacted to the target species as adversely as other members of the adjainer species.

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2. A method of identifying components of members of test species that deleteriously affect members of a target species, comprising the steps of:

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(a) separating at least one member of a test species into a plurality of components;

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(b) exposing at least some of said separated components of said member(s) of the test species separately to members of the target species, wherein the target species is a symbiont of an adjainer species;

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(c) examining said exposures to determine for said identification whether members of the target species have been deleteriously affected by said exposures; and

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(d) selecting the test species from among test species that are attached or internal

to a member of the adjoiner species whom was exposed to the target species but did not
react adversely thereto as did other exposed members of the adjoiner species.

3. A method of identifying components of members of test species that deleteriously affect members of a target species, comprising the steps of:

(a) separating at least one member of a test species into a plurality of components;

(b) exposing at least some of said separated components of said member(s) of the test species separately to members of the target species, wherein the target species is a symbiont of an adjoiner species;

(c) examining said exposures to determine for said identification whether members of the target species have been deleteriously affected by said exposures; and

(d) selecting the test species from among test species that are attached or internal to a member of the adjoiner species whom was exposed to the target species and reacted adversely thereto but not as adversely as did other exposed members of the adjoiner species.

4. A method of identifying components of members of test species that deleteriously affect members of a target species, comprising the steps of:

(a) separating at least one member of a test species into a plurality of components;

(b) exposing at least some of said separated components of said member(s) of the test species separately to members of the target species, wherein the target species is a symbiont of an adjoiner species;

(c) examining said exposures to determine for said identification whether

members of the target species have been deleteriously affected by said exposures; and

(d) selecting the test species from among test species that are attached or internal to a member of the adjoiner species whom was exposed to the target species and reacted adversely thereto but then recovered.

5. A method according to Claim 1, 2, 3 or 4, wherein steps (a), (b) and (c) are executed methodically and systematically with a large number of test species that are symbionts of the adjoiner species.

6. A method according to Claim 1, 2, 3 or 4, wherein step (a) is executed with such a large number of test species that are symbionts of the adjoiner species that the ratio of execution of step (a) when the test species are symbionts of the adjoiner species relative to execution of step (a) when the test species are not symbionts of the adjoiner species is significantly higher than said ratio of execution according to the prior art.

7. A method according to Claim 1, 2, 3 or 4, wherein steps (b) and (c) are executed in such large numbers when the test species are symbionts of the adjoiner species that the ratio of execution of steps (b) and (c) when the test species are symbionts of the adjoiner species relative to execution of steps (b) and (c) when the test species are not symbionts of the adjoiner species is significantly higher than said ratio of execution according to the prior art.

8. A method according to Claim 1, 2, 3 or 4, wherein steps (a), (b) and (c) are
executed methodically and systematically with a large number of test species that are
traditional food sources of the adjainer species.

9. A method according to Claim 1, 2, 3 or 4, wherein step (a) is executed with
such a large number of test species that are traditional food sources of the adjainer
species that the ratio of execution of step (a) when the test species are traditional food
sources of the adjainer species relative to execution of step (a) when the test species are
not traditional food sources of the adjainer species is significantly higher than said ratio
of execution according to the prior art.

10. A method according to Claim 1, 2, 3 or 4, wherein steps (b) and (c) are
executed in such large numbers when the test species are traditional food sources of the
adjainer species that the ratio of execution of steps (b) and (c) when the test species are
traditional food sources of the adjainer species relative to execution of steps (b) and (c)
when the test species are not traditional food sources of the adjainer species is
significantly higher than said ratio of execution according to the prior art.

11. A method according to any of Claims 1, 2, 3 or 4, wherein the adjainer
species is the human species.

12. A method according to any of Claims 1, 2, 3 or 4, wherein the adjoiner species has a near-human-species genetic composition.

13. A separated component of a member of a test species identified by the method of any of Claims 1, 2, 3 or 4 as deleteriously affecting members of a target species or an equivalent of said identified component.

14. A method of using a component of a member of a test species identified by the method of any of Claims 1, 2, 3 or 4 as deleteriously affecting members of a target species and/or an equivalent of said identified component, comprising the step of:

(e) exposing said identified component and/or an equivalent of said identified component to members of the target species that are residing in or on a member of the adjoiner species.

15. A method of manufacturing a product including a test-species component identified by the method of any of Claims 1, 2, 3 or 4 as deleteriously affecting members of a target species and/or an equivalent of said identified component, comprising the step of:

(e) providing said component in bulk quantities.

16. A product manufactured according to the method of Claim 15.

17. A method according to Claim 15, further comprising the step of:

(f) modifying the product to decrease any deleterious effect upon the adjoiner species caused by the identified component and/or said equivalent thereof.

18. A product manufactured according to the method of Claim 17.

19. A method according to Claim 15, further comprising the step of:

(f) modifying the product to increase the deleterious effect upon the target species caused by the identified component and/or said equivalent thereof.

20. A product manufactured according to the method of Claim 19.

21. A method according to Claim 15, wherein step (e) comprises separating said component in bulk quantities from said members of said test species.

22. A product manufactured according to the method of Claim 21.

23. A method according to Claim 15, wherein step (e) comprises synthesizing said component and/or an equivalent thereof in bulk quantities.

24. A product manufactured according to the method of Claim 23.

25. A method of testing a product manufactured according to Claim 15,
comprising the steps of:

(f) exposing said product to the adjainer species or a member of a trial species;

and

(g) examining said exposure of step (f) to determine the extent of any deleterious
effect upon the adjainer species or the trial species respectively.

26. A method of testing a product manufactured according to Claim 15,
comprising the steps of:

(f) exposing said product to the target species; and

(g) examining said exposure of step (f) to determine the extent of the deleterious
effect upon the target species.

27. A method according to Claims 1, 2, 3 or 4, wherein members of the test
species at least in some aspect deleteriously affect members of the adjainer species.

28. A method according to Claims 1, 2, 3 or 4, wherein members of the target
species at least in some aspect deleteriously affect members of the adjainer species.

29. A method according to Claims 1, 2, 3 or 4, wherein during said step of
exposing separated components of member(s) of said test species to members of the
target species, said exposed members of the target species are isolated from the adjainer
species.

ABSTRACT OF THE DISCLOSURE

A component of a member of a test species that deleteriously affects a target species that is a parasite of an adjainer species is identified by a method including the steps of (a) selecting the test species from among test species that are attached or internal to a member of the adjainer species whom was exposed to the target species but did not react adversely thereto as did other exposed members of the adjainer species; (b) separating at least one member of the selected test species into a plurality of components; (c) exposing at least some of the separated components of the member(s) of the test species separately to members of the target species; and (d) examining such exposures to determine for such identification whether members of the target species have been deleteriously affected by such exposures. The test species may be a symbiont or a traditional food source of the adjainer species

A product including such a test-species component identified as deleteriously affecting members of a target species and/or an equivalent of the identified component is manufactured either by separating the identified component in bulk quantities from members of the test species or by synthesizing the identified component and/or an equivalent of the identified component in bulk quantities. The product is tested to determine the extent of any deleterious effect upon the adjainer species and the extent of the deleterious effect of the product upon the target species. The method of manufacturing the product may further include modifying the product to decrease any deleterious effect upon the adjainer species and/or modifying the product to increase the deleterious effect upon the target species.

SELECT MEMBER OF TEST SPECIES FROM AMONG SPECIES ATTACHED OR
INTERNAL TO ADJOINER SPECIES MEMBER WHOM WAS EXPOSED TO
TARGET SPECIES AND REACTED ADVERSELY THERETO BUT THEN
RECOVERED

[SYMBIONT OF AN ADJOINER SPECIES TO THE TARGET SPECIES]

[TRADITIONAL FOOD SOURCE OF THE ADJOINER SPECIES]

SEPARATE SELECTED TEST-SPECIES MEMBER INTO COMPONENTS

EXPOSE SEPARATED TEST-SPECIES COMPONENTS
TO THE TARGET SPECIES

EXAMINE EXPOSURE TO DETERMINE WHETHER THE
TARGET SPECIES HAS BEEN DELETERIOUSLY AFFECTED

FIG.3

SEPARATE IDENTIFIED
COMPONENT FROM
TEST SPECIES IN
BULK QUANTITIES

SYNTHESIZE IDENTIFIED
COMPONENT OR EQUIVALENT
OF IDENTIFIED COMPONENT
IN BULK QUANTITIES

MODIFY TO DECREASE
DELETERIOUS EFFECT UPON
ADJOINER SPECIES

MODIFY TO INCREASE
DELETERIOUS EFFECT
UPON TARGET SPECIES

FIG.4

EXPOSE PRODUCT
TO THE ADJOINER SPECIES
OR TO A TRIAL SPECIES 50



EXAMINE EXPOSURE TO DETERMINE
EXTENT OF DELETERIOUS
EFFECT UPON THE ADJOINER
SPECIES OR THE TRIAL SPECIES 52

FIG.5

EXPOSE PRODUCT TO
THE TARGET SPECIES 56



EXAMINE EXPOSURE TO DETERMINE
EXTENT OF DELETERIOUS EFFECT
UPON THE TARGET SPECIES 58

FIG.6

DECLARATION/POWER OF ATTORNEY FOR PATENT APPLICATION

Docket No. 18-151

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled SELECTION OF TEST SPECIES FOR TESTING TO IDENTIFY COMPONENTS THEREOF THAT DELETERIOUSLY AFFECT A TARGET SPECIES MEMBER, the specification of which is attached hereto unless the following box is checked:

☐ was filed on _____ as United States Application Number or PCT International Application Number
_____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	Priority Claimed <input type="checkbox"/> Yes <input type="checkbox"/> No
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I hereby claim the benefits under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
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I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

_____ (Application Number)	_____ (Filing Date)	_____ (Status - patented, pending, abandoned)
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I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Edward W. Callan, Attorney Registration No. 24,720

Address all telephone calls to Edward W. Callan at telephone number (619) 259-5533

Address all correspondence to Edward W. Callan, 3830 Valley Centre Drive, #705-452, San Diego, CA 92130

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of sole or first inventor (given name, family name) Jens Ole Sorensen

Inventor's Signature Jens Ole Sorensen Date March 5 - 1999
Residence Grand Cayman, Cayman Islands, B. W. I. Citizenship Denmark
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☐ Additional inventors are being named on separately numbered sheets attached hereto.